

AMENDMENTS TO THE CLAIMS

1. (Currently amended) An vaccine-immunogenic composition suitable for administration to a vertebrate host which comprises:

(a) a polynucleotide vaccine-immunogenic component comprising at least one polynucleotide encoding at least one antigen, such that introduction of said ~~polynucleotide~~polynucleotide vaccine-immunogenic component into said vertebrate host results in expression of a biologically effective amount of said antigen or antigens so as to induce a prophylactic or therapeutic immune response;

(b) a protein antigen vaccine-immunogenic component comprising at least one protein antigen selected from the group consisting of model protein antigens and vaccine-immunogenic protein antigens; and

(c) a mineral-based, negatively charged adjuvant,
wherein said composition produced by a method comprising preincubating or subsequently mixing said mineral-based negatively charged adjuvant is preincubated or subsequently mixed with said at least one protein antigen vaccine-immunogenic component prior to formulating with said polynucleotide vaccine-immunogenic component.

2. (Currently amended) The vaccine-immunogenic composition according to claim 1 wherein said mineral-based negatively charged adjuvant is an aluminum salt or a calcium salt.

3. (Currently amended) The vaccine-immunogenic composition according to claim 2 wherein said aluminum or calcium salt is selected from the group consisting of aluminum phosphate, aluminum hydroxyphosphate, phosphate-treated aluminum hydroxide, calcium phosphate, calcium hydroxyphosphate, and phosphate-treated calcium hydroxide.

4. (Currently amended) The vaccine-immunogenic composition according to claim 1 wherein said group of model protein antigens range from acidic isoelectric point (IEP) proteins to alkaline IEP proteins.

5. (Currently amended) The vaccine-immunogenic composition according to claim 1 wherein said group of vaccine-immunogenic protein antigens ~~comprises~~ is selected from the group consisting of a surface protein or a core protein of Hepatitis B virus (HBV), a de-toxified toxin from the bacteria *Clostridium tetani* (a tetanus toxoid), a de-toxified toxin from the bacteria